

Robert Peck Survey Book
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Fla-314, 323, 326, 328

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Number 9

BUREAU OF ENTOMOLOGY
UNITED STATES
DEPARTMENT OF AGRICULTURE
AND
THE STATE ENTOMOLOGICAL
AGENCIES COOPERATING



OUTSTANDING ENTOMOLOGICAL FEATURES IN THE UNITED STATES FOR OCTOBER, 1926

The Japanese beetle has extended its range up the Hudson River as far as Ossining, New York, to Stamford, Conn., and southward to Long Island. In Pennsylvania it has spread westward to Harrisburg and northward to Easton.

The Hessian fly situation in Pennsylvania has been complicated by the emergence this fall of flies in volunteer wheat which usually do not emerge until spring. These infested grain sown after the fly-free date.

The corn borer in the original infested area in New York State has increased in intensity of infestation 300 per cent over the population records in 1924. The known area infested by this pest has increased about 20,000 square miles and now extends to Berrien County, Mich.

The corn ear worm has continued its depredations in the Mississippi Valley much later than usual. Reports of late and serious damage have been received from Missouri, Nebraska, and Kansas.

Larvae of what is believed to be the oriental fruit moth were found at East Lansing, Mich. This insect in the Georgia Peach belt produced one brood less than during 1925.

The walnut caterpillar is reported as much more numerous than usual in the pecan orchards of Florida and Mississippi.

The harlequin bug has been reported from the South Atlantic and Gulf States as decidedly more troublesome than usual this year.

The sugar-beet crop in southern Utah was practically a failure because of the curly-top disease. The leafhoppers were epidemic in the fields in this region.

The campaign for the control of the sweet-potato weevil in the Gulf region of Mississippi and Alabama has been so successful that where 123 farms in Pearl River County, Miss., were infested in 1923, but one farm has been found infested this year, and where 62 farms in Baldwin County, Ala., were found to be infested in 1925, but two showed any infestation in this year's Survey.

The coffee-bean weevil, usually considered as a stored-product insect, was found feeding on sound sweet potatoes on four farms near Foley, Ala. The insect was working in the storage houses, however, and not in the field.

The sweet potato leaf beetle (Tyrophorus viridicyaneus Cr.) has been

reported as damaging sweet potatoes in Walker County, Ga. This insect has not been recognized as of much importance heretofore.

In Mississippi the sugarcane beetle has caused considerable damage to sweet potatoes. In three lots an average of 26 per cent of the tubers were rendered unmarketable by the feeding of this beetle.

The cotton leaf worm, which was reported in the last number of the Survey Bulletin as making one of its periodical northern flights, made an unprecedented record this year by producing a generation of larvae in the experimental cotton plats on the Arlington Farm near Washington, D. C. Heretofore this insect has never produced larvae in the Northern States. In this number of the Bulletin records of heavy flights with more or less serious damage by the moths have been received from Massachusetts, Ohio, Nebraska, and Kansas, as well as over the cotton belt.

The boxelder bug is reported for the first time from North Carolina.

The State of California has placed a quarantine on willow and poplar trees and cuttings coming from the State of Washington because of the presence of the satin moth in that State.

OUTSTANDING ENTOMOLOGICAL FEATURES IN CANADA FOR OCTOBER, 1926

As a result of scouting operations carried out in 1926, the European corn borer has been found in 58 additional townships in Ontario and at several points in southern Quebec. In Ontario the infestation now covers most of the territory lying between the Ottawa and St. Lawrence Rivers. In southern Quebec the corn borer was found in Hull, Chateauguay, and Huntingdon Counties; the two last adjoin the State of New York.

The wheat stem sawfly is spreading and becoming more serious in Alberta. During the past summer apparently the entire central portion of the province south of Edmonton, north of Brooks, and east of Calgary, was affected, the infestation ranging from 5 to 100 per cent.

In central southern Alberta, in the Lethbridge district, a heavy infestation of the turnip aphid reduced the turnip crop by 25 to 50 per cent. Such a severe outbreak, in this section, had been previously unknown.

The codling moth is on the increase in the St. John River Valley, New Brunswick, from Springhill to Lower Gagetown, and serious outbreaks occurred in several localities, in 1926. It has also increased over previous years in southwestern Nova Scotia, in the Digby and Bear River districts.

There has been a serious apple maggot infestation in the orchards of the St. John River Valley, New Brunswick.

The cotton moth, Alabama argillacea Hbn., occurred in great numbers in southern Ontario, in September. Owing to its attacks on peaches it

was generally mistaken for the oriental peach moth by fruit growers in the Niagara district.

Severe infestations of the larch case-bearer have been observed in Cumberland County, Nova Scotia.

The satin moth has been discovered for the first time at Powell River, Vancouver Island, and Mission, British Columbia.

Black flies of the species Simulium bracteatum Coq. are reported to have caused the death of a flock of goslings, at the Experimental Station, Fredericton, New Brunswick, this summer.

GENERAL FEEDERS

JAPANESE BEETLE (Popillia japonica Newm.)

GENERAL

Monthly Letter of Bureau of Entomology No. 149 (September): The Japanese beetle has recently been found at several points along the Hudson River, between Ossining, N. Y., and New York City. Several small infestations have also been found on the southern third of Long Island, and it is known to occur at Port Chester, N. Y., and Stamford, Conn. It has been found outside the quarantined area in Pennsylvania, at Easton, Allentown, Bethlehem, Lancaster, and Harrisburg. At a public hearing held in Washington September 25, the area under quarantine was extended to include the territory mentioned. It is anticipated that the new quarantine lines will become operative October 10, 1926.

THE ANOMALA (Anomala orientalis Waterh.)

Connecticut

W. E. Britton (October 21): Though I have not visited the infestation on Long Island, I learn from Mr. Stockwell and Mr. Smith that it is fully as large as the New Haven infestation and that it has probably been there as long or perhaps longer. The infestation in Westchester County may have come from the Long Island infestation, or possibly may have come from Connecticut. As nearly all nursery firms formerly imported various kinds of stock direct from Japan and many plants came with balls of earth about their roots, it is remarkable if this insect was not brought in and planted in many places. Of course nursery stock has been sent out from New Haven, probably in all directions, but the same is true of the Long Island region, which is quite a nursery center.

GRASSHOPPERS (Acrididae)

Indiana

Harry F. Dietz (October 8): Melanoplus differentialis Thos. and M. femur-rubrum DeG. are unusually abundant this fall. The latter is the predominant species. At Bridgeport, Amo, and Terre Haute, M. femur-rubrum was defoliating apple nursery stock and feeding on the tender bark of the young shoots.

Wisconsin

S. B. Fracker (October 19): Grasshopper damage continued to increase in the late summer, especially in the southern part of the State.

CEREAL AND FORAGE-CROP INSECTS

WHEAT

HESSIAN FLY (Phytophaga destructor Say)

Pennsylvania

H. D. Smith (October 4): In Cumberland County the Hessian flies

have been found in volunteer wheat in much greater abundance than usual and are now commencing to emerge. This emergence is causing infestation of wheat sown after the fly-free date. This is an unusual occurrence because it is customary for the flies in volunteer wheat in this section of the country to hibernate until the following spring.

Iowa

C. W. Ainslie (November 1): A field in Monona County, north of Whiting which last year was quite uniformly populated by the fly was studied carefully October 29. The ground this fall is fallow with a moderate sprinkling of rank tufts of volunteer wheat. These plants are almost all heavily infested at present, some dead tillers containing from 10 to 20 puparia, 4 to 6 being common. A few mature larvae were seen. The puparia are plump and normal, will probably hibernate in perfect condition. Very little wheat in that vicinity was sowed before September 15.

Missouri

L. Haseman (September 30): Nowhere in the State is there any evidence of any material infestation and no especial effort is being directed at the delaying of the seeding of wheat. However, the heavy rainfall during the last half of September will automatically delay most of the wheat seeding until after the normal fly-free date for the wheat-growing sections.

GREEN BUG (Toxoptera graminum Rond.)

Wisconsin

S. B. Fracker (October 19): Fifteen per cent damage by the attack of this insect was reported from Bayfield, while in Taylor County some entire fields were ruined.

ENGLISH GRAIN APHID (Macrosiphum granarium Kirby)

Nebraska

M. E. Swenk (October 15): During the first week in October an abundance of the English grain aphid in some of the winter wheat fields of Frontier County was reported by the county agricultural agent of that county.

PLAINS FALSE WIREWORM (Eleodes opaca Say)

Kansas

J. W. McColloch (October 20): The following reports have been received: At Ulysses the worms are still working October 8. Hundreds of acres have been destroyed at Richfield on October 13. The county agents report injury general in Sherman and Cheyenne Counties October 15.

A FALSE WIREWORM (Eleodes suturalis Say)

Kansas

J. W. McColloch (October 27): Larvae of this false wireworm were received from Gove, Kansas, with the information that they were cutting off wheat plants.

CORN

EUROPEAN CORN BORER (Pyrausta nubilalis Hbn.)

New York Monthly Letter of Bureau of Entomology No. 149 (September):
About the middle of August an infestation survey in the portion
of eastern New York where the corn borer was discovered in 1919,
just north of Schenectady, revealed an increase of over 300
per cent in larval population since the last comparable survey
was made of that area in 1924.

SOUTHERN CORN LEAF BEETLE (Myochrous denticollis Lec.)

Kansas H. B. Hungerford (September): Very large numbers of this
chrysomelid beetle were found about the husks of ear corn in the
field (Washington County). Along with these beetles were many
chinch bugs.

CHINCH BUG (Blissus leucopterus Say)

Missouri L. Haseman (September 30): In spite of the unusual rainfall
farmers are reporting from the various sections of the State that
their cornfields have been showing an abundance of the summer
brood of bugs.

CORN EAR WORM (Heliothis obsoleta Fab.)

Missouri L. Haseman (September 30): Late sweet corn and late field corn
have shown unusual damage from the corn ear worm during the month
of September. Some patches of sweet corn show 100 per cent in-
festation.

Nebraska M. H. Swenk (September 30): The third brood of larvae of the
common corn ear worm was excessively numerous this year, as was
mentioned in my last report. In addition to unusually heavy injury
to the corn ears, this brood of corn ear worms penetrated the
cornstalks very commonly, sometimes producing serious damage in
that way. The penetrations were mostly short burrows, quite un-
like the extended burrows formed earlier in the season by the
common stalk borer. Complaints of such injury to cornstalks were
received from all parts of the State during middle and latter
September, but especially from the region from Seward County west
to Furnas County and north to Boone County, where the worms were
apparently the most numerous. (October 15): Complaints of injury
continued to be received in diminishing numbers during the first
ten days of October. From Hall County toward the middle of the
month, complaints of injury to green tomatoes, late string beans,
and even squashes with softened spots on the shell, by these
caterpillars were received.

Wisconsin S. B. Fracker (October 19): A few outbreaks have been reported
from Dane, Grant, Lincoln, and Pierce Counties.

Kansas J. W. McColloch (October 20): The larvae of the corn ear worm have been very abundant in the alfalfa fields of eastern Kansas during October. In some cases the plants have been defoliated. Reports from correspondents have been received from Bazaar, Eureka, Topeka, and Manhattan.

CLOVER

GREEN CLOVER WORM (Plathypena scabra Fab.)

Pennsylvania C. C. Hill (October 4): In Cumberland County, Pa., green clover worm adults have been found in greater abundance than usual in clover and alfalfa fields.

F R U I T I N S E C T S

APPLE

PRIMROSE FLEA BEETLE (Haltica foliacea Lec.)

Kansas H. B. Hungerford (This insect did very serious injury early this season in nursery blocks of apple grafts and seedlings at Topeka and Lawrence. All control measures proved unsatisfactory.

APPLE APHID (Aphis pomi DeG.)

Missouri L. Haseman (September 30): Throughout the summer plant lice were unusually scarce on various trees and crops, but during September the green apple aphid attracted some attention and did some damage though less than usual.

APPLE GRAIN APHID (Rhopalosiphum prunifoliae Fitch)

Nebraska M. H. Swenk (September 30): During the last week in September, specimens of volunteer wheat were received from Saline County that showed an abundance of the apple grain aphid on the roots and lower stems.

CODLING MOTH (Carpocapsa pomonella L.)

Missouri L. Haseman (September 30): The apple crop in Missouri has suffered much more serious loss from apple worms this year than during any previous years. The second brood has been very abundant and even the best sprayed orchards have shown a high percentage of wormy fruit. The partial third brood in the Missouri River apple section has caused much of the late fruit to show pin-worm injury and in the Ozark region the third brood has done much greater injury.

A. C. Burrill (October 14): Side wormy apples injured 40 per cent of the fruit in some sprayed orchards in Jefferson City, Cole County.

Wisconsin S. B. Fracker (October 19): The second brood proved at least as troublesome as usual. The county reports following: Brown (bad), Dane (30 per cent), LaFayette (25 per cent), Monroe, Pierce, Rock, (unusually numerous), Sauk (second brood very bad), and Winnebago.

Washington E. J. Newcomer (September 30): The codling moth has been much less numerous this year than for several years, and growers generally report their fruit much less infested than usual. Eight apple trees near the original point of introduction of the codling moth parasite Ascoaster carpocapae Vier. were banded last June, and have been examined regularly during the season. To date, 3,750 worms have been recovered from these eight trees, of which 846 were parasitized. This is a parasitism of 22.6 per cent which is higher than in previous years, when it usually was about 15 per cent.

YELLOW-NECKED CATERPILLAR (Datana ministra Drury)

Missouri L. Haseman (September 30): This caterpillar has caused considerable trouble in young apple orchards during the month.

SAN JOSE SCALE (Aspidiotus perniciosus Comst.)

Missouri L. Haseman (September 30): The scale throughout the month has continued to attract little or no attention. In orchards badly infested a few years ago there is some slight blotching of fruit.

OYSTER-SHELL SCALE (Lepidosaphes ulmi L.)

Wisconsin S. B. Fracker (October 19): Several reports indicate increasing trouble with the oyster-shell scale in the Fox River Valley orchards (Green Bay).

ROUNDHEADED APPLE TREE BORER (Saperda candida Fab.)

FLAT-HEADED APPLE TREE BORER (Chrysobothris femorata Ol.)

Missouri L. Haseman (September 30): Both the flat-headed and the round-headed apple tree borers have been attracting attention during the summer and fall months, especially in the young apple orchards.

PEAR

PEAR LEAF BLISTER MITE (Eriophyes pyri Fgst.)

Utah G. F. Knowlton (September 28): The pear leaf blister mite has been doing severe damage to some apple orchards in North Logan this past season.

PEACH

ORIENTAL FRUIT MOTH (Laspeyresia molesta Busck)

Michigan R. H. Pettit (October 13): Some weeks ago we found larvae

at East Lansing in golden egg or yellow egg plum. According to Dr. Carl Heinrich there is some doubt as to the identify of the larvae because of their close resemblance to those of pyricolana. The infestation occurred on only a few trees and only a small number of fruits were found infested.

Georgia

Oliver I. Snapp (October 20): Five generations and a partial sixth have been reared at Fort Valley this year, which is one less than the number reared during 1925. Larvae of the fourth, fifth, and sixth generations have entered hibernation. The season for this insect is now about over at Fort Valley.

SAN JOSE SCALE (Aspidiotus perniciosus Const.)

Georgia

Oliver I. Snapp (October 21): From present indications 75 per cent of the peach acreage in Georgia will be sprayed with lubricating-oil emulsion again this winter. Liquid lime-sulphur will be used on most of the other acreage. The scale infestation is about normal.

PEACH BORER (Aegeria exitiosa Say)

Georgia

Oliver I. Snapp (October 20): On account of losses from an over-production of peaches during the 1926 season growers in Georgia are cutting down on production costs and as a result a much smaller amount of paradichlorobenzene is being used this season than formerly. The tonnage used this year in Georgia will amount to only about one-fourth of that used in 1925. The peach borer infestation is about normal.

Ohio

E. W. Mendenhall (October 9): I find the peach borers quite bad this year in the central and southern part of the State.

PLUM

PLUM CURCULIO (Conotrachelus nenuphar Hbst.)

Wisconsin

S. B. Fracker (October 19): The usual damage is reported. In Ashland County this insect is not so bad as it was last year, in Door County it is common, in LaFayette County damage is estimated at 30 per cent, and in Pierce and Rock Counties some are to be found, also in Fond-du-Lac.

GRAPE

GRAPE LEAFHOPPER (Erythroneura comes Say)

Iowa

C. N. Ainslie (October 7): A number of complaints of serious injury to woodbine and grapevines have reached me during the latter part of the summer and investigation has disclosed the presence of this pest in swarms, forming a real misty cloud when the vines were jarred. A few of the adults carried parasites.

PECAN

WALNUT CATERPILLAR (Datana integerrima G. & R.)

- Florida E. W. Berger (September 8): H. M. Betts, Assistant Nursery Inspector, State Plant Board, reports that the walnut caterpillar is doing considerable damage in this section (Jefferson County) but not all groves of pecan are infested. Growers say that the caterpillars are more numerous this year than during the past seven or eight years.
- Mississippi M. M. High (September 30): The walnut caterpillar has been very abundant the past few weeks in almost all pecan groves about Gulfport, Landon, and Long Beach. Some small groves have been almost completely defoliated.
- R. W. Hurned (October 26): R. P. Colmer, Inspector for the State Plant Board, with headquarters at Moss Point, Miss., wrote on October 17 that I. P. Delmas & Sons of Pascagoula and Orange Grove have reported that they had observed the third generation of the walnut caterpillar (probably Datana integerrima). These caterpillars had fallen from the trees and were dead on the ground. These observers were under the impression that the caterpillars had contracted some disease that had been fatal. Mr. Colmer reports that several other similar cases had been brought to his attention. Unfortunately none of the caterpillars were collected, so there is no way of knowing definitely what has caused them to die in such large numbers.

FALL WEBWORM (Evyhantria cunea Drury)

- Louisiana W. E. Hinds & assistants (September 30): The fall webworm appears to have received a very decided setback through the severe Gulf storm of August 25 throughout the central and southern part of the State.

TRUCK - CROP INSECTS

POTATOES

COLORADO POTATO BEETLE (Leptinotarsa decemlineata Say)

- Wisconsin S. B. Fracker (October 19): This insect was reported from Adams, Ashland, Barron, Crawford, Dunn, Langlade, Racine, and Winnebago Counties. Total damage for 1926 less than usual.

POTATO LEAFHOPPER (Empoasca fabae Harr.)

- Wisconsin S. B. Fracker (October 19): Reports from the following counties have been received: Ashland, Brown, Door, Grant, Monroe, Pierce, Racine, Rock, Rusk, Sawyer, Walworth, Washington, and Winnebago.

CORN EAR WORM (Heliothis obsoleta Fab.)

Mississippi M. M. High (September 30): The tomato fruit worm, while not so numerous the past season as last year, has done considerable damage to tomatoes and corn. After the tomato crop was made the moths continued to deposit on the leaves where the young larvae are feeding at this time.

CABBAGE

WEBWORMS (Crambus sp.)

South J. O. Pepper (October 8): Webworms have been reported as
Carolina injuring cabbage and turnip greens in the coastal plain section of the State.

IMPORTED CABBAGE WORM (Pieris rapae L.)

Wisconsin S. B. Fracker (October 19): About the usual damage in the commercial cabbage growing districts. Reported from Crawford, Eau Claire, Green Lake, Kenosha, Langlade, Monroe, Racine, Rock, and Waukesha Counties.

Missouri L. Haseman (September 30): While the early summer cabbage showed relatively few cabbage worms in Missouri, the late cabbage suffered severely from heavy infestations of the imported cabbage worms.

CABBAGE MAGGOT (Hylemyia brassicae Bouche)

Wisconsin S. B. Fracker (October 19): Some belated county reports as follows: Jackson, 20 per cent damage; Kenosha, total loss in some seedbeds; Racine, bad.

CABBAGE LOOPER (Autographa brassicae Riley)

Mississippi M. M. High (September 30): The cabbage looper is quite plentiful on young cabbage, collards, mustard, and turnips at this time at Gulfport. Many young plantings have been severely injured.

HARLEQUIN BUG (Murgantia histrionica Hahn)

South J. O. Pepper (October 15): Patches of cabbage, collards, and
Carolina turnip greens are being seriously damaged in some localities of the State.

Georgia Oliver I. Snapp (October 21): The infestation here (Fort Valley) is still heavier than normal.

Mississippi M. M. High (September 30): The harlequin cabbage bug has appeared about Gulfport in unusually large numbers the past few weeks. Some small plantings of collards have been almost completely destroyed

by this bug. One grower reports cleaning them up from his place by turning the chickens into his garden for a short time.

A FLEA BEETLE (Phyllotreta cinustulata Fab.)

Mississippi M. M. High (September 30): This flea beetle is now abundant on turnips, cabbage, collards, and mustard about Long Beach and Gulfport. Its injury, however, has been greatly lessened by the application of arsenicals.

STRIPED FLEA BEETLE (Phyllotreta vittata Fab.)

Wisconsin S. B. Fracker (October 19): The county agent of Kenosha County reports that a flea beetle caused heavy losses to young cabbage plants there this season. It was probably P. vittata.

STRAWBERRY

GARDEN SLUG (Ariolimax agrestis L.)

Nebraska M. H. Srenk (September 30): In the vicinity of Pierce, Pierce County, the overbearing strawberries are reported as being seriously injured by an excessive abundance of the true garden snail Ariolimax agrestis. Residents of this section state that they never had trouble with this pest before. It is reported as also attacking late cucumbers and tomatoes.

BEANS

BEAN APHID (Aphis rumicis L.)

Ohio J. S. Houser (October 2): The insect was quite troublesome in Franklin, Pickaway, Ross, Fayette, and Fairfield Counties, and at Coshocton. Early limas were very severely injured. The late limas escaped because the outbreak of the pest was exterminated for the most part through the activities of predators and parasites.

LIMA BEAN VINE BORER (Monontilota nubilella Hulst)

South Carolina J. O. Pepper (September 28): Garden bean plants infested with what is apparently the larvae of the lima bean vine borers have been sent in from St. Matthews.

MEXICAN BEAN BEETLE (Epilachna corrupta Muls.)

Ohio E. W. Mendenhall (October 9): The Mexican bean beetle is reported as quite bad in New Paris, Preble County, and vicinity, and is doing some damage.

PEAS

PEA APHID (Illinoia pisi Kalt.)

Wisconsin S. B. Fracker (October 19): Additional county reports are as follows: Brown, Grant, St. Croix, and Waukesha.

MELONS

MELON WORM (Diaphania hualinata L.)

Mississippi

M. M. High (September 30): The melon worm has done serious injury to the melon crop in southern Mississippi the past season. In some small plantings the infestation ran as high as 70 to 90 per cent. The most serious injury was to cantaloupes.

MELON APHID (Aphis gossypii Glov.)

Missouri

L. Haseman (September 30): Throughout the summer plant lice were unusually scarce on various trees and crops, but during September the melon louse attracted some attention and did some damage, though less than usual.

EGGPLANT

EGGPLANT LACE BUG (Gargaphia solani Heid.)

South
Carolina

J. O. Pepper (October 10): Eggplants are being damaged by this insect in some localities of the State.

BEETS

BEEF LEAFHOPPER (Eutettix tenellus Baker)

Utah

Kay Sakimura (October 25): The harvesting of sugar-beet crops is now going on in the Delta district. The crop has almost been destroyed. According to the sugar factory officials, there were three or four carloads of beets this season from this area, and its planted acreage this spring was 1,615 acres. This poor crop is result of the attack of the sugar-beet leafhopper Eutettix tenellus. The weather conditions this season were very dry and available irrigation water supply was 50 per cent of normal. This drought has been also partly responsible for the poor crop; all beet growers applied irrigation upon curly-top beets but even this did not bring about good growth. As stated in my previous letter, the leafhopper was very abundant all over the beet fields, and infested curly-top beets were nearly 100 per cent. Many growers discontinued beet growing and are turning to alfalfa seed raising.

Geo. F. Knowlton (October 25): The beet crop in southern Utah was almost a complete failure, though some beets were shipped out of Elsinore, Delta, and a few other localities. The curly-top disease was largely responsible, the beet leafhopper, Eutettix tenella Baker, being found breeding in great numbers all through this section of the State, in the lowlands.

SUGAR BEET ROOT MAGGOT (Tetanops aldrichi Hendel)

Utah Geo. F. Knowlton (October 23): The sugar beet root maggot did less damage than usual this year, though some affected beets were found around Lewiston and Amalga this spring.

SPINACH

HAWAIIAN BEET WEBWORM (Hymenia fascialis Cramer)

Virginia F. W. Poos (October 15): Present in outbreak numbers on early planted spinach at Norfolk. Has never been reported as damaging spinach as far as I am able to learn.

PEPPERS

PEPPER WEEVIL (Anthonomus eugenii Cano)

California F. O. Essig (September 30): Larvae destroyed one-fourth acre of peppers, and affected the whole crop at Chino, damage being serious.

TURNIPS

TURNIP APHID (Rhopalosiphum pseudobrassicae Davis)

Mississippi M. M. High (September 30): The turnip aphid is now showing up in numbers on turnips, mustard, cabbage, and collards, but is not as yet so abundant as last year at Gulfport. It is being successfully controlled with the timely application of nicotine dust.

CABBAGE WEBWORM (Hellula undalis Fab.)

Mississippi M. M. High (September 30): The imported cabbage webworm is now showing up in some numbers on mustard and turnips at Gulfport. It is doing more damage just now to Chinese mustard but is found in lesser numbers on collards and cabbage.

SWEET POTATO

SWEET-POTATO WEEVIL (Cylas formicarius Fab.)

Mississippi K. L. Cockerham (October 11): During the last three years in Pearl River County, in the vicinity of Picayune, 123 farms have been found infested with the sweet-potato weevil. So far during the present season, after most intensive inspections, only one farm has shown infestation. It is thought that sweet potatoes will soon be moving to markets from this section again.

Alabama K. L. Cockerham (October 11): Last year in Baldwin County, Ala., in the vicinity of Foley, 62 farms were found infested with the sweet-potato weevil. To date this season, only two farms have shown any infestation. More than 300 cars of potatoes were

inspected during the shipping season and hundreds of farms have been inspected since. It is very gratifying that this great reduction has been made in one year. The Foley section is a commercial potato-growing area and the crop is annually worth a half million dollars.

COFFEE-BEAN WEEVIL (Anacerus fasciculatus DeG.)

Alabama

K. L. Cockerham (October 4): This insect is usually a feeder on seeds, dried fruits, and rotten or decayed sweet potatoes; but I. W. Berryhill reports it as feeding on sweet potatoes on four farms near Foley. It was found boring in the sound tubers, very much as the sweet-potato weevil does. In the storage houses, where cull potatoes were, considerable damage was being done. The insect must have been breeding freely in ~~mumma~~-fied potatoes near by and extended its activities to include sound tubers. No sign of injury to potatoes or vines in the field could be found.

BANDED CUCUMBER BEETLE (Diabrotica balteata Lec.)

Alabama

K. L. Cockerham (September 30): In inspecting and checking over a 50-acre field of sweet potatoes on the county convict farm this insect was found to be very abundant. At every step, as my feet disturbed the vines, the adults swarmed into the air. A considerable number of feeding marks were noted on the leaves. This is the heaviest infestation of this insect I have ever noted on sweet potatoes.

SWEET POTATO LEAF BEETLE (Typophorus viridicyaneus Cr.)

Georgia

Haliard De La Parelle (September 27): Specimens of larvae taken from sweet potatoes grown in Walker County, Ga. The seed potatoes were imported from Orlando, Fla., about three years ago. Barnyard manure was used on this piece of land for fertilization. The grub looks to me like a species of Scarabaeidae. (Determined by Dr. Adam Boving).

SUGARCANE BEETLE (Eutheola rugiceps Lec.)

Mississippi

R. W. Harned (October 26): W. L. Gray, Inspector for the State Plant Board with headquarters at Natchez, investigated on October 12 a report in regard to a beetle causing injury to sweet potatoes, on the property of F. L. Callon, at Fenwick, Adams County. Mr. Gray found a beetle at work that he identified as the rough-headed corn stalk beetle. He found that this beetle had caused considerable damage to the sweet potatoes. He examined three lots of potatoes and found that 25 per cent, 22 per cent, and 32 per cent were unmarketable because of injuries caused by these beetles. He reports that this does not indicate the total injury, as many of the potatoes that were slightly injured by the beetles were still marketable.

SOUTHERN FIELD-CROP INSECTS

COTTON

BOLL WEEVIL (Anthonomus grandis Boh.)

Louisiana W. E. Hinds & assistants (September 30): Boll weevil infestation has been generally heavy in the central and southern parts of the State throughout the season. Infestation in the northern part was light until into August and has since developed sufficiently to cut the fields considerably, largely because of the fact that the work of the cotton flea hopper in the early summer delayed fruiting on large areas so that the crop became abnormally late. This is indicated also by the fact that cotton ginning in many sections is about one-fourth of that ginned to the end of September, 1925.

COTTON FLEA HOPPER (Psallus seriatus Reut.)

Louisiana W. E. Hinds & assistants (September 30): Cotton flea hopper work has resulted in decreased yields and in later fruiting. In many fields, however, there was time for the plants to recover and produce a fair crop in spite of this insect because of the comparative freedom from weevil infestation until after the 20th of August. The recurrence of the flea hoppers on cotton in 1927 will be watched very closely. If this damage becomes regular it will be an exceedingly serious factor in cotton production over a considerable portion of the cotton belt.

COTTON LEAF WORM (Alabama argillacea Hbn.)

Massachusetts P. Simmons (October 5): On September 8 and 9 large numbers of these moths, as perfect as though just emerged from their cocoons, became a nuisance in the business section by soiling the windows at Pittsfield, Berkshire County.

Virginia J. L. Webb (October 27): Early in October leaf worms were defoliating cotton in the experimental plats on the Arlington Farm. I am under the impression that the larvae have never been recorded so far north before.

Georgia Oliver I. Snapp (September 28): The cotton worm had completely stripped the foliage from a large field of cotton near Fort Valley by this date. The top crop of cotton in the field will be reduced as a result of the insect. Most of them have now pupated.

Ohio G. A. Ruhner (October 5): Moths of the cotton caterpillar began to appear during the second week in September. Were abundant on grapes, peaches, and apples at Sandusky by

September 15. First specimen observed at Sandusky on September 12. Numbers increased greatly by September 25. The species has been reported more abundant than usual in all of the fruit-producing counties of Ohio bordering on Lake Erie.

- Nebraska M. H. Swenk (September 30): During the week of September 19 to 25, citizens of Hall, Howard, and Greeley Counties, in east-central Nebraska, reported a heavy flight of the cotton worm moth Alabama argillacea Hbn. These moths swarmed mostly about the strawberry beds, and were uniformly reported as doing serious injury to the everbearing strawberries by sucking the juice from the interior of the berry, leaving it apparently sound but really soft and worthless. Similar reports were received from the same region during a similar flight of the moths five years ago. (October 15). The flight of the cotton worm mentioned in the above report was supplemented by a smaller flight during the second week in October.
- Missouri L. Haseman (September 30): The cotton leaf worm has done much damage to the foliage of cotton in the southern part of the State and during the last half of September the migratory moths appeared throughout the State, damaging grapes, late peaches, and other fruit.
- Kansas J. W. McColloch (October 20): Adults injured peaches at Studley and Paola, and strawberries at Larned. The larvae ruined cotton in an experimental plot at Topeka.
- Mississippi K. L. Cockerham (October 22): All during the month of October I have noticed the heaviest flight of these moths that I have seen for years at Biloxi, collecting around lights at night.
- Louisiana W. E. Hinds & assistants (September 30): Cotton leaf worms occurred abundantly through the northern and northwestern portions of the State during the latter part of August, and through September have stripped most of the cotton where no poison was applied to check them. This has decreased yields and lowered quality in a very considerable degree.
- Haiti Geo. N. Wolcott (October 12): After considerable poisoning at this place, Cul-de-Sac plain, Alabama argillacea Hbn. has practically disappeared but I noticed an abundance of eggs the last time I was there, and am expecting an outbreak there within the next week or two. Alabama has not appeared elsewhere around Port-au-Prince this season, and no reports have come in of injury elsewhere in Haiti.
- BOLL WORM (Heliothis obsoleta Fab.)
- South Carolina J. O. Pepper (October 1): Many reports from various parts of the Piedmont section have been received stating that the cotton boll worm is doing severe damage to cotton bolls in many fields. This

insect has been unusually abundant in the State this year.

MELON APHID (Aphis gossypii Glover.)

Louisiana W. E. Hinds & assistants (September 30): Cotton plant lice developed abundantly in July, but were later controlled by frequent driving rains so that their damage was not so serious as it might have been otherwise.

COTTON RED SPIDER (Tetranychus telarius L.)

Haiti Geo. W. Wolcott (October 12): Two or three weeks ago a serious outbreak of the cotton red spider occurred on one plantation near the northern boundary of the Cul-de-Sac plain, but heavy rains since are now keeping it under control.

SUGAR

SUGARCANE BORER (Diatraea saccharalis Fab.)

Louisiana W. E. Hinds & assistants (September 30): The sugarcane borer infestation has been much lighter than the average throughout the season, in spite of the fact that the infestation in the fall of 1925 was the heaviest ever experienced. The sugarcane borer attack is evidently concentrated on early planted corn rather than on cane during the first two generations, and is then transferred to cane, principally at the beginning of the third generation. The fourth generation is now under way; but the season is so late that only a partial fifth generation is expected to develop in the southern edge of the cane area.

SUGARCANE BEETLE (Aethiola rugiceps Lec.)

Louisiana W. E. Hinds & assistants (September 30): The rough-headed sugarcane beetle has been abundant in many localities through the season. Adults have been active through a longer period than heretofore reported. A sample of sugarcane received about September 20 showed several beetles working in the basal section of the stalk.

F O R E S T A N D S H A D E - T R E E I N S E C T S

MISCELLANEOUS FEEDERS

A PIERID BUTTERFLY (Kricoaone lyside Godart)

Haiti Geo. W. Wolcott (October 12): During April and May considerable numbers of this butterfly were noted flying in Port-au-Prince, often as high as the tops of the royal palm trees. This early in the season they did not seem to be going in any particular direction. This moderate flight continued during July and August. Early in September there was a decided increase in their numbers

and by the middle of this month the peak of abundance was reached. A week later very few were to be seen. The center of abundance appeared to be the more desert portion of the plain of the Cul-de-Sac, especially near the Coast. The insects were migrating north and northwestward at least 20 or 40 miles. During the time of the heaviest flight automobile radiators were completely covered with the bodies of these insects and where small puddles were available the butterflies were so numerous that clouds were startled by passing cars and hundreds of specimens would strike occupants. During the peak of the flight the insects were moving steadily northward, closely skirting the coast, very often stopping to drink the salty water from the wave-moistened stones and driftwood. Hundreds of the larvae of these butterflies were found on the trunks of *ligustrum*, which appears to be the food plant of this species. The only parasite of these larvae observed was a species of *Apanteles*.

BAGWORM (*Thyridopteryx ephemeraeformis* Haw.)

- Missouri L. Haseman (September 30): The bagworm has been attracting considerable attention in the various sections of the State.
- Kansas J. W. McColloch (October 20): Two reports of injury to cedars have been received recently from Colony and Mound City.

BOXELDER

BOXELDER BUG (*Leptocoris trivittatus* Say)

- North Carolina Z. P. Metcalf (October 19): The first time this insect has been reported in this State so far as our records go. Reported from Wake County.

CAMPHOR

CAMPHOR THRIPS (*Cryptothrips floridensis* Watson)

- Mississippi M. M. High (September 30): The camphor thrips has done serious injury in spots to camphor trees along the Mississippi Coast the past few months, one serious infestation being at the U. S. Veterans' Hospital No. 74 in Gulfport, where the authorities in cooperation with this station sprayed the trees with nicotine sulphate and whale-oil soap with most excellent results.

ELM

ELM LEAF BEETLE (*Galerucella xanthomelaena* Schrank)

- Virginia Monthly Letter of the Bureau of Entomology No. 149 (September): William Middleton recently visited West End, near Gordonsville, where he is attempting to establish introduced parasites of the elm leaf beetle. The beetle infestation is rather heavy this year and the trees are showing severely the effects of years of defoliation.

MAPLE

COTTONY MAPLE SCALE (Fulvinaria vitis L.)

Nebraska M. H. Swenk (October 15): Complaints of serious injury by the cottony maple scale (Fulvinaria vitis) to soft maples and locust trees in Box Butte County during the past season were received during the second week in October.

OAK

A MOTH (Heterocampa sp., apparently obliqua Packard)

Wisconsin S. B. Fracker (October 19): This caterpillar has cleaned up most of the oak leaves in a 20-acre woodlot at Tsyler, Jackson County.

OAK WEBWORM (Archips fervidana Walk.)

Wisconsin S. B. Fracker (October 19): Scrub oaks severely attacked in June and many defoliated at Wausaukee; many of them have developed a new crop of leaves.

PINE

ABBOT'S WHITE PINE SAWFLY (Lophyrus abbotii Leach)

Wisconsin S. B. Fracker (October 19): A small amount of defoliation in one planted grove examined at Mukwonago, Waukesha County.

PINE TUBE BUILDER (Eulia politana Haw.)

New York G. M. Coddling (September 26): Found on practically all white pines in noticeable quantities in Westchester County. More prevalent each year.

POPLAR

POPLAR TENT CATERPILLAR (Melalopha inclusa Hbn.)

Maryland Mr. Bruman (September 30): Collected on Populus sp. (Lombardy poplar) at Chevy Chase about September 30. Determined by Dr. Carl Heinrich of the Bureau of Entomology as Melalopha inclusa. They had defoliated several trees.

COTTONWOOD APHID (Neothomasia bruneri Williams)

Nebraska M. H. Swenk (September 30): In Dawes and Box Butte Counties during the third week in September, the aphid Chaitophorus bruneri was reported doing injury to poplars by sucking the

sap from the new shoots and tender bark.

WILLOW

HICKORY APHID (Longistigma caryae Herr.)

Indiana

H. F. Dietz (October 8): The large sycamore aphid is the only plant louse that has become abundant enough this year to attract the attention of the layman. We have had numerous reports of this plant louse on willow and in the past month have commonly found it on the trunks and larger limbs of a number of different willows in nurseries.

SATIN MOTH (Stilpnolia salicis L.)

Washington

California State Department of Agriculture News Letter, Volume 8, No. 21 (October 16): The satin moth, an insect which does serious damage to poplar and willow trees, has been found in portions of the State of Washington, where it has migrated from British Columbia, according to information given out today by A. C. Fleury, Supervising Quarantine Officer of the California Department of Agriculture, and all willow and poplar trees, or cuttings, coming from Washington and from eastern sections of the United States where the moth is prevalent are prohibited entry into California.

In issuing the statement regarding the satin moth the Department says that this dangerous insect, although not widely prevalent in the United States, has been known to exist for some time in portions of Maine, New Hampshire, Massachusetts, Rhode Island, and Washington, and recently has been discovered in Connecticut.

GREENHOUSE AND ORNAMENTAL PLANTS

MISCELLANEOUS FEEDERS

ARMYWORM (Cirphis unipuncta Haw.)

Mississippi

K. L. Cockerham (October 3): From July to the present date the Biloxi Golf course has had sporadic and isolated outbreaks of the armyworm on different parts of its course; the worms at times threatened the destruction of fairways and greens, but have been controlled in every instance with the application of poison mash, without any material injury. The brood which showed up the last week in October is apparently the last one of the season.

A MOLE CRICKET (probably Scapteriscus abbreviatus Scud.)

Florida

M. D. Leckard (September 28): I have received the report that about 15 acres of fairways are badly attacked at the country club here (St. Augustine), and extensive use of poisoned bait

and carbon disulphid is being resorted to.

APHIDIDAE

Indiana Harry F. Dietz (October 8): The roots of such cultivated and native composites (weeds) as I have examined this fall are alive with plant lice, Forda (Trama) erigeronensis Thos. Plants examined were wild lettuce (Lactuca spp.) dandelion, asters, and zinnias. One variety of cultivated aster (Callistephus hortensis) has been found which does not collapse under the attacks of this pest, but grows in spite of a heavy infestation.

HIBISCUS

LESSER SNOW SCALE (Hemichionaspis minor Mask.)

Florida M. D. Leonard (September 15): A large planting along the main boulevard of the Whitefield Estate (Sarasota) has most of the shrubs moderately to severely encrusted with this scale. Determined by Mr. H. Morrison.

ROSE

L.

ROSE STEM GIRDLER (Agrilus viridis var. fagi Ratz.)

Michigan Eileen W. Erlanson (September 22): The bane of my life (as a rosarian) is the European boring beetle identified by the Bureau of Entomology as this species. This is very bad on native species and was apparently only recently introduced. The larvae make a spiral bore in the cambium of the two-season-old shoots and successfully kill them off in August. This summer I spotted the same pest in the wild rose collection at the Arnold Arboretum, University of Michigan, and shall probably hear a howl going up from nurserymen before long.

Michigan R. H. Pettit (October 7): I received what appears to be the rose stem girdler in rose canes, from Jackson. We have not seen any adults but the work is so characteristic that after reading Dr. Britton's descriptions and seeing his illustrations, I would not hesitate to say that the work is that of Agrilus viridis L. variety fagi Ratz.

INSECTS ATTACKING MAN AND

DOMESTIC ANIMALS

MAN

FUSS CATERPILLAR (Megalopyge opercularis S. & A.)

Texas F. C. Bischoff (October 26): Early in October reports of people

being stung by the caterpillar of this species in this locality (Dallas) began to come in. The caterpillars have been fairly abundant in several sections of the city, and some spraying has been done to destroy them. The outbreak, however, has not been nearly so severe as that of 1920.

FLEAS (Siphonaptera)

GENERAL STATEMENT

F. C. Bishopp (October 26): The infestation of dwellings and outbuildings by the cat or the dog flea, Ctenocephalus felis Bouche or C. canis Curt., has continued into October as indicated by the reports coming from various parts of the country. It appears that the past summer has been one unusually favorable to flea development.

Missouri

L. Haseman (September 30): The Department has had numerous complaints regarding epidemics of fleas in farm buildings during the month. It is seldom that complaints regarding fleas continue to come in to the office so late.

Nebraska

M. H. Swenk (September 30): The dog flea Ctenocephalus canis Curt. was reported as heavily infesting farm homes and buildings in Knox County, during the third week in September. (October 15): The dog flea was also reported as troublesome household pest during the period covered by this report, October 1 to 15.

HUMAN FLEA (Pulex irritans L.)

Texas - Nebraska

F. C. Bishopp (October 26): Reports of the infestation of houses and outbuildings with the human flea have continued to come in during September and early October. Cases of very heavy infestations have been reported from Nebraska, and Mr. Parman has also investigated a rather heavy infestation on a ranch near Uvalde, Tex.

MOSQUITOES (Culicidae)

Indiana

Harry F. Dietz (October 8): Mosquitoes (Culex spp.) have been unusually abundant during September. We have received several calls from nurserymen asking us what they could do to get rid of these pests as they so annoyed the men who were budding trees as to make good work impossible. Children have been so severely bitten as to be made ill.

YELLOW-FEVER MOSQUITO (Aedes aegypti L.)

Texas

F. C. Bishopp (October 26): Yellow-fever mosquitoes have been unusually abundant in this vicinity (Dallas) during the present summer and fall. They are still (October 26) causing considerable annoyance in and about residences.

CATTLE

HORN FLY (Haematobia irritans L.)

- Missouri L. Haseman (September 30): During the last half of September this blood-sucking fly had attracted much attention. However, the cold wave which swept the State during the last few days of September materially reduced their numbers.
- Texas F. C. Bishopp (October 26): Horn flies did not become so numerous on cattle in this section (Dallas) this fall as usual. The average number per head at the present time probably does not exceed 50.

STABLE FLY (Stomoxys calcitrans L.)

- Missouri L. Haseman (September 30): During the last half of September this blood-sucking fly had attracted much attention. However, the cold wave which swept the State during the last few days of September materially reduced their numbers.

COMMON CATTLE GRUB (Hypoderma lineatum DeVill.)

- Texas F. C. Bishopp (October 26): Heel fly activity was observed at Sonora by O. G. Babcock on October 10. E. W. Laake found the backs of about 50 of the dairy cattle in the vicinity of Dallas infested on October 25. Most of the larvae were very young, but a few had evidently been present in the subdermal tissues for at least 10 days.

SCREW WORM (Cochliomyia macellaria Fab.)

- Texas F. C. Bishopp (October 26): Reports from various parts of Texas indicate that the losses from the screw worm during the present year have been heavy, though they have perhaps been exceeded by those of certain years in the past.

DOGS

BROWN DOG TICK (Rhinicephalus sanguineus Latr.)

- Florida F. C. Bishopp (October 26): A few specimens of this tick were found on dogs in the city pound, which indicates that this species has become established as far north as Jacksonville. Previously it was found only in the southern part of Florida and in southwestern Texas.

BEEES

WAX MOTH (Galleria mellonella L.)

- Nebraska M. H. Suenk (October 15): During the second week in October

an instance of heavy infestation of a small apiary in Hitchcock County with the wax moth was received.

INSECTS INFESTING HOUSES AND PREMISES

AN ANT (Cremastogaster lineolata Say)

Missouri A. C. Burrill (October 10): Rotting out clapboards and shingles at Jefferson City, Cole County, by letting rain water in at their borings. This is the second year they have swarmed late. This year on October 1 and 2 they were inside one house and covering the outside at 1. p. m. on the second. Rain at 3 p. m. destroyed many. I find this species in numbers in hundreds of beehives.

CIGARETTE BEETLE (Iasioderma serricorne Fab.)

South Carolina J. O. Pepper (October 13): The bags of cottonseed meal carried over from last year are being seriously damaged by the cigarette beetle. The insect is present in large numbers at Ware Shoals, some bags being completely covered, and severe damage being done.

Kansas J. W. McColloch (October 20): Specimens of the larvae and adults of the cigarette beetle were received from Larned with the information that they were abundant in upholstered furniture in a house there.

BOOK LOUSE (Troctes divinatoria Müll.)

Indiana Harry F. Dietz (October 8): Booklice (Atropos divinatoria) have come to my attention as a pest of overstuffed furniture. In each case the upholstering or packing material was flax tow or Spanish moss, which, becoming moist on account of the excessive humidity and rainfall, furnished an ideal material as food for these insects.

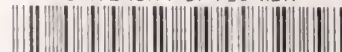
Kansas J. W. McColloch (October 20): A severe infestation of book lice in furniture was reported from Atchison on October 4.

TERMITES

Kansas J. W. McColloch (October 20): The following reports of termite injury to dwellings have been received since the last report, October 2, Pittsburg; October 7, Abilene; October 9, Ellsworth and Abilene.

BLACK CARPET BEETLE (Attagenus piceus Oliv.)

Nebraska M. H. Swenk (October 15): The black carpet beetle was reported



as an injurious household pest during the period covered by this report, October 1 to 15.

WEBBING CLOTHES MOTH (Tineola biselliella Hum.)

Nebraska M. H. Swenk (October 15): The webbing clothes moth was reported as an injurious household pest during the period covered by this report, October 1 to 15.

S T O R E D - G R A I N I N S E C T S

STORED-GRAIN INSECTS (Several species)

Missouri L. Haseman (September 30): The stored-grain insects, particularly the stored grain moths, have been attracting attention, and farmers, millers, and elevator men have been calling for help with grain fumigation.

Kansas J. W. McColloch (October 20): Reports of injury to wheat in farmers' bins have been received from Norcatur, Yates, Center, Sharon Springs, and Wallace.

Nebraska M. H. Swenk (September 30): Complaints of injury by stored-grain pests have continued to be received in increasing numbers during September. More reports are now coming in of injury to stored wheat than were received during the first half of September, though there are still numerous reports of injury to shelled corn. The Indian meal moth, Plodia interpunctella Hbn., is still prominently reported in stored corn. These reports come from all parts of the State. (October 15): During the first half of October complaints of injury by stored-grain pests continued to be received in about the same numbers as during the last half of September. The Indian meal moth continues to be much complained of. From Red Willow County a report was received of a heavy infestation of stored corn by the drug-store beetle, Sitodrepa panicea L., along with a lesser abundant of the foreign grain beetle, Cathartus advena Waltl.